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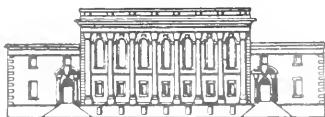
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Presented by
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Class of 1978

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A FUNCTIONAL ANALYSIS OF THE CERAMICS
AT LIBERTY HALL ACADEMY

Senior Honors Thesis
Sweet Briar College
Anthropology
April 1978
Elizabeth M. Williams

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AT LIBERTY HALL ACADEMY

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PREFACE

The contents of this paper are representative not only of the research devoted to the hypothesis but also of the days, weeks, and months spent at the site. I enrolled in Dr. McDaniel's summer field school in June 1977, and have been working with the artifacts, sources, and people from the excavation since then. My January term was spent in Lexington working with the ceramics from the Steward's House and Liberty Hall. The present thesis, far from killing my interest in this site and historical archeology as a whole, has instead increased my desire to explore them further.

Acknowledgements are almost always incomplete, I'm sure, and this is no exception. I could write another 60 page paper of people to whom I am grateful, but I will confine my list to just a few for the sake of brevity.

Mr. Jeff Beaubier of Sweet Briar College, showed incredible fortitude when it came to reading all my rough drafts. The same may be said of John Armstrong, Liberty Hall Scholar 1977-1978, and my friend. To Dr. John McDaniel and the Staff of the Liberty Hall Archeological Excavations can go the credit for my interest in and knowledge of the Scotch-Irish in the Shenandoah Valley. Special thanks are due to Dr. Kitty Seaman, Mr. Beaubier, and Dr. McDaniel for their generous review of my thesis. Ann Ottesen deserves the lion's share of the credit for the existence of this thesis. Without

her belief in my abilities, her support of my efforts, and the interest she kindled in the science of archeology, I never would have attempted anything so ambitious and difficult as an Honors Thesis.

Myriads of other people were also responsible for the completion of this thesis; my typist and good friend, Marybeth Lipinski; my roommate who had to live with me, Carey Johnson; the owner of the typewriter, Paula Brown; and my innkeeper, Mark Derbyshire. Thanks to Kurt Russ, Charlie Hall, Hank McKelway, and especially Parker Potter, for being my friends and information booths.

CONTENTS

CHAPTER		PAGE
One	Introduction and Background	1
Two	Ceramics	27
Three	Research Methods	38
Four	Data	46
Five	Conclusions	58
	Suggestions for Further Study	63

LIST OF FIGURES

FIGURE		PAGE
1	Map of Site	13
2	Types of Ceramic at Liberty Hall	28
3	Ceramic Type Distribution	47
4	Ceramic Assemblages by Percent	49
5	Ceramic Function Distribution	52
6	Average Weight of Sherds	54
7	Total Fragments of Each Ceramic Group	56
8	Wares by Total Mass	56
	Appendix - Laws to Be Observed by the Students of Liberty Hall	64

CHAPTER ONE
INTRODUCTION AND BACKGROUND

This paper represents the completion of research designed to fulfill the requirements of a Senior Honors Thesis in Anthropology at Sweet Briar College. The Junior Honors requirements were met in September 1977.

Historic archeology in the New World is probably the least recognized and most discounted branch of anthropology. It is often seen as uninteresting and uninformative, as just another name for historical research, or, at best, a sort of modified prehistoric archeology. "Archaeology is similar to history in part of its purpose, that of delineating sequences of events in the past and their importance to mankind today."¹ Historical archeologists are working to gain recognition for their field as a valid, scientific, valuable branch of anthropology, with unique techniques and problems. It is hoped this paper might contribute to that effort by testing a hypothesis in a scientific manner and drawing logical conclusions that might add to the knowledge in this area.

A comparison of the ceramic assemblages from two different contemporary structures on the now-abandoned Liberty Hall campus is the subject of this paper. It is hypothesized that variations found in the ceramic collections between the two structures should be due to different activities taking place in these structures. One of the structures

is presumed to be the Steward's House, the dining hall of the school. The other structure is Liberty Hall, the classroom dormitory building. There are a number of corollaries to be derived from this hypothesis. They are:

1. If the food preparation and consumption took place mainly in the Steward's House, then there should be more total ceramic material recovered from there than from Liberty Hall.
2. If the food preparation and consumption took place mainly in the Steward's House, then there should be more storage, preparation, and serving vessels recovered from there than from Liberty Hall.
3. If the food preparation and consumption took place mainly in the Steward's House and Liberty Hall was used as a classroom-dormitory, then basically the same people used both structures concurrently.
4. If the same people used both structures concurrently, then the differences found in the ceramic collection could not be a reflection of differences in socio-economic status of the inhabitants of the two structures.
5. If the Hall was used as a dormitory-classroom, then a greater percentage of non-culinary ceramics should be found at Liberty Hall as opposed to the Steward's House.
6. If the purpose of the Steward's House was a dining hall for the entire school, then there should be more ceramics there than would be expected for a single-family dwelling.

These corollaries will be examined in light of the results of the ceramic analysis in Chapter Five.

In order to test evaluate the hypothesis, tests, and conclusions of this paper, background information on all related areas (history of the school, the area, the site,

the study) is necessary.

The ruins of Liberty Hall Academy still stand in Lexington, Virginia. The visible remains consist of two limestone walls bracketing a mound of overgrown rubble. Excavation in the area has uncovered the foundations of what may be the Steward's and Rector's Houses, and also a spring-house and a brick kiln. A brief history of the institutions preceding Liberty Hall Academy is necessary for a full understanding of the historical importance of Liberty Hall and of the lifestyles of the Scotch-Irish settlers responsible for it.

The Scotch-Irish who eventually settled in the Shenandoah Valley emigrated to the U.S. in the mid-1700's. They preferred the more sparsely settled areas of Pennsylvania to the crowded coast. On reaching Pennsylvania, many turned south down the Appalachian valley systems and eventually settled in Rockbridge and Augusta counties, Virginia.²

These Scotch-Irish settlers were staunch Presbyterians, compared to the Church of Englanders in the Tidewater. The Presbyterian religion laid a strict emphasis on education, and from this arose, in one instance, Liberty Hall Academy. The first educational institutions established by the Scotch-Irish were probably of an elementary level. Gradually, through time, as the schools gained the support of the Presbytery and well-educated pastors, the level of academics rose, until finally in 1782, this institution was recognized as a college.

According to McDaniel, Moore, and Watson,³ there were three academic institutions preceding and evolving into Liberty Hall Academy. The schools were located on different sites in Augusta and Rockbridge counties, Virginia, between Greenville and Lexington. The common factor in these schools was personnel. According to historic records, when one school failed for one reason or another, the rector and/or staff simply moved to another location and started another school.

The earliest of these schools McDaniel, Moore, and Watson called Larkin Spring School, or Augusta Academy. In the scanty historical records of the time it is referred to by both names. Larkin Spring School was established in 1749 in Augusta County by Robert Alexander, a Presbyterian minister. The exact location of the school has not been established archeologically, and historical records are unclear. The level of academics at Larkin Spring more closely approached elementary or college preparatory level rather than university level. The curriculum included classes in reading, writing, ancient languages, and Bible courses.

There is only scanty evidence linking Larkin Spring School with the second school, Mount Pleasant. One document describes the same man, John Brown, as both rector of the Larkin Spring School and pastor of the Mount Pleasant School. The same source indicates that Brown, a graduate of Princeton, founded Mount Pleasant in 1760, also in Augusta

County. This school offered a curriculum similar to that of Larkin Spring.

In 1774, a Presbyterian minister, William Graham, was appointed by the local presbytery to run the school under the Reverend Mr. Brown. Graham remained with this school and its antecedents until 1796, playing a major role in determining the course of the school's growth. Graham expanded the curriculum, adding the sciences, mathematics, philosophy, and ethics in addition to the existing courses. This curriculum was designed to prepare students for the ministry. By 1774, Mount Pleasant had attained the status and recognition of an Academy, and was consistently referred to as Augusta Academy.

Graham's arrival signalled the gradual decline of Brown's power and involvement in Augusta Academy. By 1776, the presbytery had named Graham to the Rector's position with a John Montgomery as his assistant. Brown was effectively shut out. At the same time, twenty-four trustees were appointed and a permanent site for the Academy was selected. The site for the reorganized school was Timber Ridge in Rockbridge County.

Timber Ridge constitutes the third phase of the institutions giving birth to Liberty Hall and Washington and Lee University. There were several reasons for relocating the school. Apparently the presbytery had considered the school at Mount Pleasant to be an experiment, and not a

good site for a permanent school. Graham had accepted a post as pastor of the Timber Ridge Church, and the presbytery had no desire to lose him as rector of the school. Two local landowners donated a total of eighty acres for the school at Timber Ridge and the residents of the area promised to supply building materials and firewood for the school for the next twenty years. In light of these facts, it was much to the advantage of the presbytery to accept the offer and relocate the school.

In May of 1776, the presbytery officially changed the name of the school to Liberty Hall. It should be noted that this is not the structure that can be found on Mulberry Hill west of Lexington today.

The schoolhouse at Timber Ridge was wooden with one and a half storeys and a 6½ foot cellar. The Rector's House had one storey and an attic, also with a cellar. The Steward's House (where meals were prepared and eaten) was built of logs, and was 26 x 20 feet. This information has come from historical records; no archeological evidence has been found to date.

Tuition and board at the Timber Ridge School was about 100 pounds. In November 1776 Andrew Scott was appointed Steward. His duties were to prepare meals, make boarders' beds and clean their rooms. Before Scott's arrival, students had taken their meals at nearby farms.

The American Revolution had many effects on the Academy at Timber Ridge. Many patriotic students volunteered

for service, dropping the enrollment to seven in 1779. The war also caused inflation. In the same year board alone was raised to 91 pounds. Because of these circumstances, Timber Ridge was forced to close in 1779.

During this period of financial difficulty, Reverend Graham bought 290 acres of land in Rockbridge County near Lexington. He hoped to augment his meagre salary by raising enough food for his family. Here, during the duration, he also instructed a few students who remained in the area. Graham and two of his neighbors, sometime before late 1782, donated a total of nineteen adjacent acres in the hopes of establishing another permanent site for the school. This area is known as Mulberry Hill, and was the final location of Liberty Hall Academy, and the site of excavations today.

A small wooden school was built on the site before 1782, but unfortunately stood for less than a year. It burned in February, 1783. Arson was suspected.

During the time this small school was functioning, Graham and some members of the presbytery presented a petition of incorporation to the Virginia General Assembly for consideration. In December 1782, the Assembly granted the charter. It was the first college charter granted in the Commonwealth, and gave the Academy the right to confer degrees and appoint professors. Liberty Hall Academy was officially recognized as a college level institution. The first degrees were awarded in 1785. By this charter, the

Academy also became independent of the Presbyterian Church.

A second schoolhouse was built shortly after the first one burned. It also burned, accidentally it seems, in 1790. Classes were held in a private home until a third school could be built.

The third school building was much more substantial than the first two. It was a limestone structure, 35 feet x 30 feet, and three storeys high. It served as both a dormitory and a classroom. There was a fireplace in each room on each floor, twenty-eight windows, two doors, and a belfry. Each floor had four rooms. Eight of these were dormitory rooms, and four were classrooms. Probably the first floor was used as classrooms and as a library and the top two floors as dormitories. The Trustees' minutes cite four students as a maximum occupancy per room, so this gives a maximum of thirty-two boarders. This building was finished in late 1793.

The Trustees also provided for the construction of Rector's and Steward's Houses. The Rector's House was to be 20 feet x 25 feet with stone foundations and brick walls. The bricks for the walls were to be made on the site. It was to be two storeys and have two doors and ten windows.

The plans for the Steward's House have been lost, but it probably had a kitchen, living quarters for the Steward and his family, a dining room, dairy and a cellar. The Steward's House was also finished in late 1793.

Over the next ten years a smokehouse, horse stable, rail fences, and a springhouse were added to the Liberty Hall campus. Of these later additions, archeological evidence has been found of the springhouse only.

Student life was regimented. Two times a day the students had to recite prayers. They were not allowed to gamble, drink, dance, swear, or call each other nicknames.⁴ The purpose of the Academy was to instill "all the most important branches of literature necessary to prepare young gentlemen for the study of law, physick (sic) and theology . . ."⁵ Even though the school was not officially affiliated with the Presbyterian Church any longer, the religious influences remained strong and the Academy still prepared many students for the seminary.

Meals were taken in the Steward's House. A typical menu would be coffee, tea, or hot chocolate for breakfast, meat, sauce, and vegetables for dinner, and milk for supper. Bread and butter were served at every meal.

In 1803, for the first time, students were divided into a grammar school and four upper classes. The grammar school curriculum included reading, writing, Latin, Greek and religion. The upper grades added classics, mathematics, surveying, philosophy, electricity, chemistry, astronomy, geography, and theology. The ages of the students ranged from ten to twenty years old.

In 1796, Liberty Hall Academy received fifty shares of the James River Company from George Washington. The dividends

from these shares greatly alleviated many of the Academy's financial problems. In gratitude, the Board of Trustees changed the name of the school to Washington Academy.

The flourishing Academy received a great setback in late 1802 or early 1803. Liberty Hall caught fire accidentally, and was so damaged that it had to be abandoned.

According to a newspaper account of the event, the fire took hold slowly, allowing time to save many of the scholastic and personal articles.⁶ There are no records indicating whether the other buildings burned. As far as can be determined archeologically at this point, they did not.

The Academy moved for the last time to its present location within the city limits of Lexington, Virginia, where it can be found today as Washington and Lee University. The other buildings on Mulberry Hill were slowly abandoned and eventually most of them were torn down for construction materials. Today only the two walls of Liberty Hall remain as evidence of the Scotch-Irish interest in higher education.

There has been a tendency among historians and others concerned with the early history of the Shenandoah Valley to consider the area as a frontier during the period from the Revolution to 1800. R. D. Mitchell, in his book, Commercialism and Frontier,⁷ claims that there are three phases of development in the Shenandoah Valley in the 18th century. The pioneer phase, from 1720 to 1760 was marked by a "steady population growth, rapid land acquisition."⁸ The second phase, from 1760 to the 1770's showed "more rapid

demographic change, and westward expansion and increasing commercialization of agricultural life."⁹ He goes on to say that after the Revolution, this area was no longer a frontier. It entered the third phase (1770 to 1800) when the "patterns and levels of economic development within the valley tended toward increasing similarity."¹⁰ This is the period of Liberty Hall Academy. These changes created an economic dependance between the valley and the Tidewater, and the valley and southeast Pennsylvania, the "mother country" for most of the inhabitants. There was a movement away from subsistence farming and toward a more specialized, integrated, larger society, with close ties to and a dependance on the longer settled areas. By 1800, about $\frac{1}{4}$ of the land in the valley was cleared, and about half of the farm output was for sale.

These characteristics that marked the late 18th century Shenandoah Valley are not those of a frontier. Liberty Hall Academy was not the little red wooden schoolhouse in the wilderness that some people see it as. It was a symptom of the growing sophistication of the region.

The ruins of Liberty Hall Academy on Culterry Hill in Lexington have long excited local interest. The site has a long history of partial excavations and scuvenir hunters. It has been reported that a Washington and Lee professor, Hale Houston, excavated Liberty Hall in 1931.¹¹ Professor Houston was a great collector of nails and left many nail

exhibits from Liberty Hall with the University. It was found, however, that if this professor did some excavations they were not very complete or comprehensive. Through a core bore analysis of a walnut tree standing amidst the ruins between the two walls, it was shown that the tree was about seventy-five years old. The tree was about thirty years old when the excavations reportedly took place. A complete excavation would have uprooted the tree. Professor Houston's project must have been less than comprehensive.

The recent excavation of the area outside the walls of the Hall has failed to show any signs of this type of disturbance, i.e. prior excavations. It may safely be assumed that Professor Houston restricted his activities to the interior of the walls.

Other than this instance, the site has not undergone any planned archeological excavation prior to the present project. The Liberty Hall Archeological Project, as it is officially called, was begun by Professor John McDaniel and staff of Washington and Lee University in the Spring of 1974. In addition to working on the site during Washington and Lee's Spring Semester, a summer school excavation project was initiated, so work continues at the site from early April to early August. To date four structures or sets of foundations have been discovered. They are: Structure One--the Steward's House; Structure Two--Liberty Hall; Structure Three--the spring-house; and Structure Four--the farmhouse. Structure One is

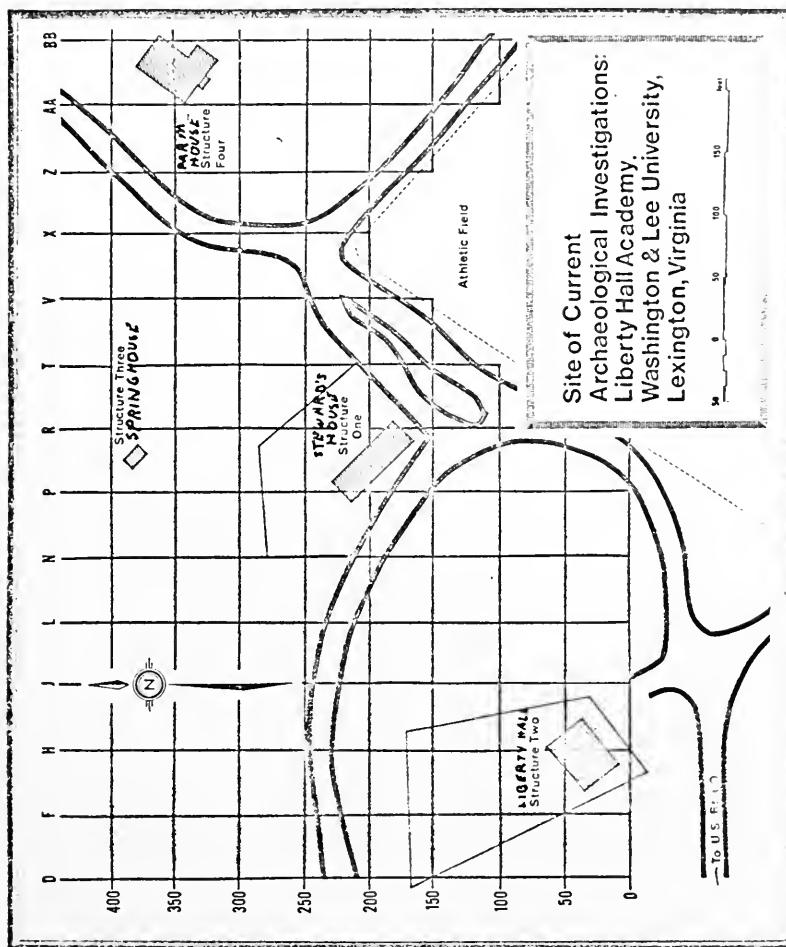


FIGURE 1: MAP OF THE AREA OF CURRENT ARCHAEOLOGICAL INVESTIGATION

tentatively called the Steward's House at this time. While it is certain that there was a Steward's House on the grounds, historic documentation is scanty, and it has not been proven beyond a doubt that the foundations uncovered actually are those of the Steward's House. This will be explored in detail later.

The method of excavation used at this site is fairly simple and effective. Over the entire site area a twenty-five foot grid of lines running north-south and east-west was plotted. All such work was done accurately using a surveyor's transit and level and Philadelphia rods, with points set in concrete as the major reference points. Each area or goal was assigned a particular operation number. Trenches were opened within each operation area and were designated by operation/location numbers. These trenches were not necessarily lined up parallel to the twenty-five foot grid lines, but their corners were located with respect to grid points. This method allowed the excavators much leeway in excavating where and how they thought best without having to conform to the grid directional orientation.

The trenches were excavated in levels, using natural stratification where it was available, and otherwise using arbitrary levels. Most of the work was done by trowel, a mattock being used only when a layer of sterile soil was encountered. Finds were bagged on the spot and the bag was

labelled as to operation/location (trench number), small finds number (consecutive numbers were used to designate the artifact arbitrarily), date, the initials of the small finds recorder (the person in charge of labelling small finds), and type of small find (glass, ceramic fragment, metal, etc.) This information was also entered into a small finds notebook. Each ceramic fragment was bagged separately. Common items found in abundance, like nails, brick, mortar, and glass, were placed in bags in quantities, without each individual piece or chip being bagged separately. In the lab, the finds were treated, (usually washed in water), labelled with the operation/location and small finds number in indelible ink. This makes possible cross-reference with the small finds catalog, where a complete description of the artifact is recorded.

Aside from the artifacts yielded from this site, Liberty Hall presents a truly unique set of factors to be examined by the archeologist. The historic archeological significance is unparalleled by any other site of this type known at the present. Liberty Hall is the only academic institution to be excavated west of the Blue Ridge Mountains that dates to the Colonial and Revolutionary period. The site can give valuable information about the so-called "frontier" status of this area and period. In addition to its historical significance, Liberty Hall is one of the few archeological examples of the culture of the many Scotch-Irish

who immigrated to this country in the eighteenth century.

These historic, social, and cultural factors are in themselves enough to warrant close study of the site as an evolving facet of the emerging American nation without focusing on the archeological aspects. In fact, some such study has been done.¹² Archeologically, the site presents an even more complex, unique, and exciting challenge. An opportunity is available to increase the limited knowledge of the colonial Scotch-Irish in the Shenandoah Valley.

The excavation of any site must take into account the individual characteristics the site posseses. Each site has its own characteristics and problems that the archeologist must recognize and deal with, and Liberty Hall has more than its share. The fact that the ceramic analysis will be between two structures within the same site is in itself an unusual characteristic. Most analyses work between sites, not within a site as this one does. There are historic records that suggest that both structures were used by the same people concurrently. While this is not unknown in excavating historic sites, it is somewhat unusual, and can be traced to the fact that Liberty Hall was an academic institution, not a private dwelling, place of business, etc.¹³

Working comparitively within a site results in many of the characteristics peculiar to the study. Since the structures under study were used concurrently by the same people, there is no need to adjust the findings to accomodate

different numbers of inhabitants or different time periods for purposes of direct comparison.¹⁴ These adjustments are often necessary in inter-site studies for the sake of accurate comparisons.

A study similar to this one in the methods of analysis used was done by Outlaw, Bogley, and Outlaw on the Pettus and Utopia sites in Tidewater Virginia.¹⁵ This study was an attempt to verify socio-economic status independently determined through historic records. Outlaw, Bogley, and Outlaw used four analyses, comparing the ceramics in both absolute number of sherds and by percentages; by different general categories of ceramics (coarse wares, refined wares, porcelain); by function of vessels; and by source of wares (imported, domestic, colono-Indian). The study done at Liberty Hall differs from the study above except for some similarities in the methods of analysis used. In the study on Liberty Hall, socio-economic status is not being questioned. The function of the ceramics plays a large part in the hypothesis. The source of the ceramics is not critically examined in this thesis because this test is used as an indicator of socio-economic status, which is not of particular interest in this thesis.

Other studies done on the ceramic collection from Liberty Hall include a ceramic dating formula application to Structures I and II.¹⁶ This study used Stanley South's revolutionary method of approximating a mean occupation

date of a site from the mean ceramic date.¹⁷ This study was particularly successful at Liberty Hall. The date derived from the formula was less than .5 years off the actual date gained from the historic records.

Another study was done on the coarse ware from the four structures and how they reflected the functions of the structures in comparison with each one.¹⁸

Studies have been done on non-ceramic artifact groups from the site. Metal analyses,¹⁹ and button analyses²⁰ have perhaps proved to be most informative about the life at Liberty Hall to date. Further studies on these artifact groups are presently in progress.

A study of particular interest to this thesis is one of those in progress. An in-depth analysis of the artifacts and all available data is being done on Structure One to determine as conclusively as possible if it is the Steward's House. The results of this study could have a major impact on the conclusion of this thesis.

This thesis had inherent problems which fall into two categories. They are 1) the "fait accompli" problems--the factors that are due to the nature of the site, and over which the archeologist has no control. They are already facts that cannot be changed, and must be dealt with as well as possible. 2) The problems over which the archeologist has some jurisdiction. These problems are related mostly to excavation technique, and usually can be foreseen and avoided.

The experienced archeologist and field worker encounters few of these problems. Any good site study should include mention of the problems encountered and how they were handled.

Some of these two types of problems can be compensated for, some are not as disruptive as they first seem, and some are unalterable and can only be recognized. This section is a discussion of some of the major problems encountered in the excavation of the Liberty Hall site, and more specifically, some of the problems encountered in this particular study. One of these problems is the assumption inherent in the hypothesis and deserves first mention. That is the assumption that Structure I is indeed the Steward's House. As mentioned before, this problem is the subject of an extensive study now in progress. It will be dealt with here very briefly to satisfy the needs of this investigation.

The original dimension of the Steward's House as it was constructed in 1793 have been lost so no historical information exists except the following facts: The Steward's House probably contained a kitchen, dining room, living quarters for the Steward, a dairy, and some sort of cellar.²¹ The Steward's duties may be found on pages six and nine, but briefly they are to feed the boarders three meals a day and to clean their rooms. The lack of documented information on the dimensions of the Steward's House is a major 'block' in determining unequivocally whether Structure I was indeed

the Steward's House. This is regrettable but does not cast either a positive or negative light on the question. The documented evidence could clear up the question; its absence tells nothing. The answer to this question must be sought in existing evidence. This evidence consists of the artifact record and distinct archeological features of Structure I itself. The artifact record gives the strongest support to the theory that Structure I is the Steward's House. The great quantity of ceramic ware from Structure I cannot be explained if Structure I is a single family dwelling or any kind of outbuilding other than a kitchen/dining room. The great amount of ceramic material indicates the structure functioned as a dining hall for more people than could have lived in the building. It follows therefore that Structure I served a specialized function as some sort of food-related area, i.e. a steward's house.

From the ceramic collection even more reliable conclusions can be drawn from the data. In C. Hall and K. Russ's manuscript "Compilation, Data Presentation, and Preliminary Analysis for the Structure I Area"²², artifact distribution for each operation/location within the structure was computed including the mean ceramic date for the structure. Their preliminary evaluation of data included the fact that the mean ceramic dates yielded "were within the Liberty Hall occupation period."²³ This structure was definitely inhabited at the same time that Liberty Hall was.

In another type of artifact analysis, M. Derbyshire's "Metal Artifact Analysis at Liberty Hall"²⁴, he states in reference to Structure I,

"Those artifacts in quadrants III and IV are predominantly hardware, lumped metal, and sheet metal....These artifacts basically represent barn and shed materials. If we look at quadrants I and II, we find a large concentration of personables and decor as well as refectory artifacts....This again seems to support our hypothesis about Structure One's uses associated with both Liberty Hall Academy and with a later dated barn."²⁵

The metal refectory artifacts strongly suggest a steward's house. Eating utensils would be out of place in any other sort of outbuilding. The "personables and decor" would also be found only in a domestic setting and not in a stable or barn.

Structure I was located conveniently between Liberty Hall (about 80 yards away) and the closest spring (45 yards away). In view of the surrounding outcroppings of bedrock, Structure I's location is the only feasible one for a steward's house if it was to be placed between the Hall and the spring. These observations cannot be taken as conclusive evidence in the Structure I question, but they support the theory that Structure I is the Steward's House.

The problem of the identity of Structure I is one of the 'fait accompli' problems mentioned earlier. The evidence presented here I believe is sufficient to support the view that Structure I is the Steward's House. A more comprehensive study of this problem may draw different

results, but for the purposes of this thesis, I feel the conclusion drawn here is satisfactory. Hereafter, Structure I will be referred to as the Steward's House.

Another problem that has arisen during this study is the disturbances of the two structures prior to excavation. This disturbance is also a 'fait accompli' problem. It has already happened and must simply be handled as best as possible.

The Steward's House appears to have been disturbed in two ways. Through the artifact record and also through eyewitness accounts, it seems that this structure was used as some sort of agricultural outbuilding, i.e. a barn, stable, or a toolshed, at some point in its history. In his paper "Metal Artifact Analysis at Liberty Hall", Mark Derbyshire shows there is a significant amount of hardware (nuts, bolts), tools, and unidentifiable metal artifacts found in and around the Steward's House.²⁶ The hardware and tool categories are probably the best indicators this structure at one point or another was used as more than just a dining hall. These types of artifacts (nuts, bolts, plow teeth, etc.) would be out of place anywhere except in a barn or toolshed. Also, the fact that so much metal was found at the Steward's House (3776 artifacts) as opposed to that found at the Hall (179 artifacts) indicates that the Steward's House was in use long after Liberty Hall was abandoned as an academic institution. It would seem that

after 175 years of weathering, most of the metal at the Hall would have disintegrated. The metal count for the Hall bears this out. The large amount of metal at the Steward's House is probably a result of later deposition; the elements have not had as long a time to work on the metal, resulting in more metal at the Steward's House today.

During its use as a barn, the ceramics at the Steward's House may have been swept out and carted away, broken up further, displaced, etc. There is no accurate way to determine the extent of this type of disturbance. There is also the possibility that later types of ceramics were deposited during the period of later use. This possibility may be dealt with by separating the artifacts from the period under study from those of later periods. In the case of ceramics, which change styles so rapidly over time, this is fairly easy.

The second type of disturbance found at the Steward's House is plowing. After the building was dismantled, the area was plowed under. Plowing would have the effect of further breaking up the ceramic fragments, bringing them to the surface, destroying the stratigraphy.

There is really no way to compensate for the disturbance caused by plowing. The probable effects on the artifact collection can be recognized and noted, but beyond that not much can be done.

A third problem appeared in one of the methods of analysis. During the computations for one of the tables, it was found that there are considerable discrepancies in the average size of ceramic fragments between Liberty Hall and the Steward's House. The refined ceramic fragments from the Steward's House have an average weight of almost 3 grams as opposed to an average weight of about .5 grams for the Hall. The coarse ware and porcelain categories show similar significant differences, the Steward's House containing the larger fragments. (See Figure 6) These differences are due to something that happened at the Hall to affect the ceramics that did not happen at the Steward's House, or perhaps vice versa. The best way to deal with this unalterable situation is to deal with the ceramics by actual mass instead of by number of fragments. This procedure is discussed in depth in Chapter Four.

A possible explanation for this discrepancy in average ceramic fragment size between structures can be found in the disturbance of the Hall prior to present excavations. As can be seen in Figure 6, the ceramic fragments from Liberty Hall are smaller on the average than those from the Steward's House. It has also been noted that the Steward's House was utilized long after the Hall burned. The Hall, on the other hand, was abandoned in 1802, and thereafter the land was cultivated. The rubble on the interior of the walls of the Hall made plowing there difficult if not impossible,

but there is concrete evidence that the immediate exterior was plowed under.²⁷ Plowing would probably have the effects of further breaking up the sherds, destroying the stratigraphy, moving the sherds, etc. Granted, this type of disturbance probably also took place at the Steward's House, but it was working for about one hundred years longer at the Hall. A great majority of the ceramic fragments taken from the Hall and used in this study were from exterior of the walls, so plowing has a maximum effect on the totals from the Hall.

Another problem that could be seen as possibly affecting the results of this study is the nature of the fire that destroyed Liberty Hall. According to a Richmond newspaper account, "The flames had got to such an extent that all exertions to extinguish them proved fruitless. The library and college apparatus and student's property were generally saved."²⁸ It might be argued that as a result of this, the ceramic assemblage found inside the Hall is non-representative either because 1) most of the material was removed before the fire destroyed the building, or 2) The material there represents a single catastrophic event and not a gradual deposition over time. These arguments may be refuted in a number of ways. First, it is not certain that someone trying to save his belongings from a fire would give priority to ceramics which are easily breakable and easily replaceable. It would be more logical

to save necessary, expensive, and irreplaceable items such as books, clothing, art, and more personal items. Secondly this argument may be refuted by the fact that as mentioned before, the great majority of the ceramic fragments used in this study that came from the Hall came from the exterior of the structure and any disturbance on the interior would not significantly affect the quantities or ratios of ceramics in this study. It is inherently assumed that the fire affected little, if any, of the area exterior to the walls.

It is regrettable that the inconsistencies and problems cited here and in other chapters of this thesis exist, but the archeologist will always have to deal with situations such as these. In most cases, they cannot be eliminated, they are givens; they must be adjusted for. It is hoped the questions or problems raised in this section have been adequately dealt with. They have been recognized and analysed, as have been their probable effects on the results and conclusions of this thesis.

CHAPTER TWO

CERAMICS

The ceramics found at the Liberty Hall site fall into two major groups, refined ware and coarse ware. The distinction between these two groups is based primarily on functions of the vessels common to these wares, thickness of vessel walls, and degree of translucency. At this site the refined wares are imported and coarse wares are domestic. This distinction holds only for this site. Refined wares were delicate-looking and usually used in tea sets, fine table ware, and fine serving ware. Articles used for preparation and storage of food and toilet receptacles (chamber pots, water pitchers, etc.) were usually made of coarse ware.

Three major types of wares, porcelain, earthenware, and stoneware, are likely to be found at the Liberty Hall site, and some varieties of these types can be either refined ware or coarse ware. (See Figure 2, p. 28) Porcelain is always refined ware. Earthenware can be either refined ware (i.e. creamware, pearlware) or coarse ware (i.e. redware). Stoneware is always coarse ware, as it was used almost exclusively for food storage.

In brief summary, the refined group includes porcelain and some types of earthenware, while the coarse ware group is comprised of stoneware and a type of earthenware called redware.

All of the refined ware at this site was imported.

FIGURE 2

TYPES OF CERAMICS AT LIBERTY HALL

REFINED WARE COARSE WARE

PORCELAIN

EARTHENWARE

CREAMWARE

PEARLWARE

EARTHENWARE

REDWARE

STONEWARE

Only a handful of American potters produced refined ceramics prior to 1800, and none at all in the Shenandoah Valley region.²⁹ There are no examples of domestic (American-made) refined ware at this site. Coarse ware, on the other hand, required less technique in manufacture, was more utilitarian, and coarse ware potteries appeared all over the colonies, including the Shenandoah Valley of Virginia.³⁰

The porcelain so far excavated at the Liberty Hall site is either Chinese export or English. The Chinese have been making porcelain since the fourth century A.D.,³¹ but all Chinese export porcelain found in North America belongs to either the Ming (1364-1644) or the Ch'ing (1644-1912) dynasties, most likely at this site to the latter.³²

Chinese porcelain is a non-porous translucent pottery made from kaolin clay and feldspathic rock and covered in a high-gloss glaze that does not flake. The body is pale gray to off-white.³³ Chinese export porcelain is extremely hard, being able to resist steel files.³⁴ The first Chinese export porcelain reached the east coast of North America about 1650. In the 17th and early 18th centuries, Chinese export porcelain was very expensive tableware and has been found in only a few excavated upper-class homes.³⁵ By the middle of the 18th century, porcelain was becoming more prevalent. Its popularity resulted, by the end of the century, in a great abundance of poor quality porcelain. Quality was sacrificed to quantity.³⁶

True Chinese export porcelain was hand-painted, using a number of different colors, glazes, and designs. Porcelain designated for export was different in quality and decorative themes from that the Chinese kept for themselves. Export porcelain used both western and Oriental motifs and was often of poorer quality than porcelain for the domestic Chinese market.

Chinese export porcelain was decorated in both underglaze and overglaze colors. Underglaze simply means that the design was applied to the vessel before it was glazed, and overglaze means it was painted over the glaze. Underglaze blue in the willow or Chinese house pattern was a common design.³⁷ Overglaze, especially in red, reached a height from 1750-1800.³⁸ Two styles, Imari and 'famille rose' were particularly popular. Imari, originally a Japanese design, consisted of overglaze red and gilding. Famille rose was large pink peonies surrounded by green leaves.³⁹ This design was usually put on larger pieces - tureens, serving dishes, etc.

It took the English centuries to learn the secret of making porcelain, and by 1800, English porcelain still had not reached the quality of Chinese porcelain. English porcelain, sometimes referred to as soft paste porcelain, lacked the hardness of Chinese export ware. It sometimes contained glass in the paste which caused blemishes in the form of bubbles.⁴⁰ English porcelain was decorated using

the transfer printing technique, usually in underglaze blue. Chinese porcelain was always hand-painted.

These distinctions between English and Chinese export porcelain are important archeologically because, after having spent some time buried in the ground, the softer English porcelain loses its surface and decoration.⁴¹ This facilitates its identification. Unfortunately however, it is not easy to determine the finer details of the English porcelain from the glaze and decorative technique when erosion has occurred.

Earthenware is a porous, opaque, and very versatile ware. Of all the ceramics of this period, they were the easiest and cheapest to make.⁴² Earthenware can be refined or coarse. The differences lie in the function, appearance, fragility, method of manufacture, and glaze. In this section only the refined earthenwares found at Liberty Hall are discussed. Coarse earthenwares are discussed later in this chapter.

Creamware, or Queen's Ware, is classified as fancy or fine tableware. The process of producing creamware was discovered in 1740 by Thomas Astbury in Devonshire, England, but not until J. Wedgwood started manufacturing and distributing it in the 1760's was it commercially practical.⁴³ Astbury had mixed the Devonshire clays with calcined flint (flint which has been heated until it becomes a powder). Most creamware (except the very early

pieces) are made from light colored clays. These are covered with a transparent lead glaze after firing that pools in the crevices of the ware causing green or yellow stains. The first creamwares had a definite yellowish cast to them, but gradually over time the ware became whiter.⁴⁴

It was possible to color the ware under the glaze creating underglaze designs from blue, purple, brown, yellow, green, and gray.⁴⁵ By 1762 Wedgwood had developed his popular rich green glaze and by 1780 was producing his famous imitation black onyx, basalt, jasper, and marble wares with cameo works.⁴⁶ None of these types have been found at the Liberty Hall site thus far.

Most of the creamware found in colonial sites came from the West Country of England (Devonshire and Somerset), but creamware was also manufactured in America in Salem, Massachusetts, by 1773 and New York by 1798.⁴⁷

In the latter part of the 18th century, creamware became probably the most popular ware in England and much of Europe. It supplanted its predecessor, salt-glazed stoneware, by "being fashionable, and looking expensive, combined with ease of manufacture, durability, and comparative cheapness."⁴⁸ Undecorated creamware was found in almost any home serving multiple utilitarian purposes. Fancy creamware could be found in upper class houses as good china.

Some different styles of decoration became firmly

established and popular on creamware. The styles of decoration mentioned here are only a sample, but represent what has been excavated at the Liberty Hall site. Typical decorative techniques include transfer printing, feather edged rims (developed in 1765)⁴⁹, and shell edged rims (developed in the 1760's).⁵⁰ Transfer printing is a technique where an elaborate design is engraved on a copper plate and transferred to the ware by a special type of paper. Feather edging was done by embossing the rims in a feather-like pattern and then painting the rims by hand. Shell edged rims were hand-engraved, and then hand-painted, usually in blue or green. However, when pearlware became popular in the 1790's, demand for fancy creamware dropped, and these decorated pieces became rare.

Pearlware was invented by J. Wedgwood in 1765 as he was experimenting with a whiter ware.⁵¹ It began to be mass produced in the 1790's. It was originally called Pearl White. This new ware had a larger flint content than creamware. A small amount of cobalt was added to the glaze, causing a blue pooling in the crevices of the finished product.⁵² By 1800, pearlware had pretty well replaced creamware as the most popular type of ceramic because of its whiter finish. Pearlware's supremacy lasted until about 1820.⁵³

Many types of decorations were developed and used on pearlware. In addition to common feather- and shell-edged

styles and transfer printing styles borrowed from creamware, underglaze polychrome, annular, mocha, and willow transfer styles appeared. One innovation used on pearlware was incising and painting the shell-edged pattern by machine instead of by hand, resulting in a much more regular and uniform design.

These earlier types of decoration are most prevalent at the Liberty Hall site. After 1792 the newer types of decoration mentioned above (mocha, etc.) proliferate, but are not as common at the Liberty Hall site as they are on the British market. This could be due to many factors; the distance of the school from any major port, socio-economic class of the Scotch-Irish Presbyterians at Liberty Hall, politics (i.e. embargoes, tariffs, etc.), or even personal taste. Despite this, a few pieces of the more recent wares were found at the site, so a brief definition of them is presented.

Beginning around 1792, a transfer willow pattern was used on pearlware. Previous transfer patterns on creamware were usually done in brown or black, but willow patterns were mostly done in blue.⁵⁴ There were two decorative innovations in 1795 - polychrome pearlware and annular ware. Polychrome wares were simple designs in many pastel colors applied to the biscuit (clay before firing) under the glaze. The designs were often floral arrangements.

Annular wares sported horizontal bands of different

colors, including black, green, light brown, and pale blue, on a white background.⁵⁵ This design was popular until 1815.

The earliest dated mocha ware is 1799.⁵⁶ This is only three years prior to the burning of the Hall, which would make it unlikely that great amounts of mocha ware would be found at the site. There are a few examples, however. This decorative technique was applied to both refined wares and coarse wares. The mocha design on pearlware consists of brown fern-like paintings usually accompanied by an annular design as well. The brown paint was manufactured from tobacco juice and urine.⁵⁷

The other general ceramic group is coarse ware. Its characteristics include thick body, less sophisticated decorative patterns, and different glazes. It was produced usually for food storage and preparation. The two types of coarse ware found at the Liberty Hall site are earthenware and stoneware.

There are several definitions of 'earthenware'. The most general use is applied to all ceramic that is not translucent. This is the functional definition used in this thesis. The coarse type of earthenware found at the site and described in this section is redware.

Some redwares were imported from England; these vessels were usually decorated with pipeclay or colored slip.⁵⁸ None of the redware excavated from Liberty Hall

has been decorated in this manner; therefore it is likely that the redware at this site is of local origin. "The word Local, however, remained the key to American pottery well into the eighteenth century, for most of the products were vastly inferior to imported wares and did not find markets beyond their means of manufacture."⁵⁹

Redware is made of red Virginia clay which lends its tints to the finished product. This clay was very workable. Flint chips were added to prevent deformation during firing, while feldspar was added as a flux and to give hardness. The vessels were fired once at about 800°C., coated usually with a lead glaze, and fired again at 1100°C.⁶⁰

Redware, because of its porosity, softness, availability, and inexpensive cost, was used mainly for everyday cooking and eating utensils. It could also be used for dry storage.

"Stoneware is essentially a vitreous or vitrified pottery, meaning simply that it has a dense body which even in unglazed form will not absorb water."⁶¹ Good stoneware clay came mostly from Amboy, New Jersey, and Long Island. Sometimes the potters added some local red clay to make the stoneware clay stretch farther. The clay is mixed with sand and a binder to prevent cracking, and then the vessel is fired once under intense heat and glazed by throwing handfuls of salt into the kiln.⁶² Later stoneware vessels often sported hand-painted blue underglaze designs - plants,

animals, mottos, maker's marks, on top of the gray body. Stoneware, because of its impermeability and imperviousness to acid and alkali, was used mostly for storage and pickling crocks, jars, and jugs, prior to refrigeration.

As can be seen from this chapter, type of ceramic limits and governs the general functions of the type. There are exceptions to this rule, but generally porcelain and other refined wares are used as serving and eating vessels, while coarse wares are used mostly for storage, cooking, preparation, etc., not unlike the practices of today. This generalization is tested in Figure 5 of this paper.

CHAPTER THREE
RESEARCH METHODS

"The various methods and techniques of archaeology, from radiocarbon dating to grid layouts, from typology to template analysis, are all directed in some way toward the explanation of behavior in the past."⁶³ This statement includes a premise which is basic to the discipline of archeology - human behavior and activity are reflected in artifacts.⁶⁴ The purpose of archeology is not the collection of artifacts for their intrinsic value, but the collection of artifacts for the purpose of inferring the human behavior that produced those artifacts. An artifact may be defined as any material object produced or shaped by human workmanship.⁶⁵

Once it is realized that the collection of artifacts is not an end in itself but a means to an end, it becomes clear that the end sought is answers to questions about the culture under investigation. "Archaeological research is not unplanned, harum-scarum pot hunting. Nor does the archeologist set out to find arrowheads, just to see how many he can collect. Research begins by defining a topic or problem to be studied about the behavior of bygone peoples. The topic usually is rather general, so the researcher must state one or more specific questions, which derive from the problem, and list the kinds of information that would answer them."⁶⁶ The archeologist, in the

interests of efficiency, accuracy, and science, formulates the questions (or hypotheses) before beginning the excavations of the artifacts which he needs to answer the questions. In this way he can plan his excavations so that all the possible information he may need to test his particular hypothesis is extracted from the site. He will not run into any incomplete data while writing up his report. His excavation is entirely problem-oriented, not just haphazardly dug. In addition to making sure he extracts all information that may be useful to his hypothesis, most archeologists try to obtain any other information that may be pertinent to any later studies of the site. The major probelm with archeology is that excavation of a site destroys the site forever. Another archeologist cannot go back later and re-excavate the same site with a different hypothesis in mind. The site no longer exists, so it is necessary to record it as completely and accurately as possible the first time.

Most archeological hypotheses that involve a comparison of two sites have in them a cause and effect relationship, i.e. if this culture exhibited such and such a trait, and the second culture didn't, then these types of artifacts will be found in site A and not in site B. In order to pinpoint the explanation for any observed differences all but one variable must be eliminated in the

comparison. If more than one variable is present, it is difficult to attribute the result to only one cause. The archeologist tries to eliminate as many variables as possible in his excavation techniques and also in his analyses. For example, if he wanted to compare the effects of steel knives on social structure, he would try to find two groups in the same area, with the same type of subsistence levels, residency rules, and basic material culture; in other words keeping all the variables constant except that one for which he wishes to test. Otherwise, the differences noted could be due to any variables present. The hypothesis could not be proved.

After choosing a site and formulating a hypothesis, it is necessary to "explicitly define the techniques necessary to collect that data."⁶⁷ Only after these conditions are met is it advisable to begin excavation.

After the arduous task of excavation and its attendant duties (lab treatment, categorizing the artifacts), the harder task of analysing the data and writing the report appears. There are as many methods of analysis as there are sites and hypotheses. Statistics will often show trends within the artifacts which the archeologist may have missed.⁶⁸ It is simply a matter of choosing the methods best suited for the site, data, and hypothesis.

The above guidelines are basic to almost any archeological excavation. Each site has its own characteristics

that make it necessary to improvise on this basic theme.

The Liberty Hall site is no exception.

The excavation of the Liberty Hall site was begun in 1974. The hypothesis presented in this thesis was formulated in 1977. Obviously the excavation was not planned around this particular hypothesis. Fortunately, however, the excavation techniques are comprehensive enough and the artifact data complete enough to be able to extract the necessary information from the records for this hypothesis. There are a few inevitable inconsistencies or problems and they will be mentioned next.

It is often impossible to excavate an entire site. Such is the case at the Liberty Hall site. The Steward's House was almost completely excavated on the interior and partially on the exterior. In all, about 80% of the area was excavated.⁶⁹ Liberty Hall has been almost completely excavated on the exterior, but hardly at all on the interior. About 50% of the total area has been excavated.⁷⁰ If excavation was dictated by the needs of this thesis alone, ideally equal amounts of area would have been sampled.

Excavation is not dictated by the needs of this thesis, however. Other factors such as the features of the site influenced this decision.

The degree and types of disturbance at the Steward's House dictated most excavation be interior to the walls.

The Steward's House, after it was totally abandoned in the early 20th century, was partially dismantled for building materials, and then plowed under. This soil disturbance would have been most severe outside the walls, because the foundations must have protected the interior somewhat from the plow. This was a major point in deciding to concentrate on the interior while excavating. Fortunately, however, one trench exterior to the walls uncovered what may have been a trash area. Here a particularly large amount of ceramic fragments was uncovered.

As mentioned, 50% of the Hall area has been excavated to date, the majority from the exterior. There are two reasons why the ceramic collection from this structure still constitutes a representative sample for analysis of the ceramics at Liberty Hall. The first reason is the nature of the destruction of the Hall. The fire would have damaged most ceramics beyond recognition and burning timbers and, later, falling limestone blocks would have smashed and buried anything left over. A certain amount of work (at least three trenches) has been done in the interior of the Hall, and so far very few ceramic fragments have been found.

The second and more important reason it was better to excavate outside the walls was because gradual depositions were laid down outside over nine years, while the material inside is the result of a single catastrophic event. The ceramic collection in the Hall at the time of the fire

would be representative of ceramics in the year 1802, not of the entire occupation span of the Hall.

Even though the most logical and fruitful areas of the two structures have been excavated, the fact remains the 80% excavation of the Steward's House does not compare with the 50% of the Hall. However, no matter what percentage of a site is excavated, whether it be 80% or 50% or 25%, if the trenches are distributed randomly and comprehensively, a proportionally representative sample of different wares should be obtained. As long as the comparison uses relative proportions of wares in addition to other types of comparisons, the results should be valid.

Another problem with the hypothesis is one common to many similar theses. As mentioned before, to be absolutely certain that an observed fact is due to a certain cause, it is necessary to eliminate all other variables. The major variables to be considered in this study are time (both period and length of occupation), geographical location, population size at the sites, types of sites, and economic and social status of inhabitant. It is desirable to hold as many of these variables constant as possible between site. These categories are especially important when dealing with ceramics that vary in time, space, and social status. It is nearly impossible to find two sites that match in all but one of these variables. This is not to say that the Liberty Hall site does completely, but because its

buildings were functionally linked in one institution, this eliminates more than the usual number of variables. The time, location, population size, and economic and social status variables are eliminated in any comparison of the Steward's House and Liberty Hall simply because the same people used both structures concurrently. It must be noted, however, that the Steward's House may have been occupied after the Hall burned. Liberty Hall was finished in late 1793 and burned in early 1803, giving a nine-year length of occupation, with a mean historic date of 1798. The Steward's House was also finished in late 1793, and apparently survived the fire that destroyed the Hall. It is not certain how long it stood afterwards. An old Lexington resident says it was in use as a barn at the beginning of this century. The only thing known for certain is that the structure did stand longer than Liberty Hall. This is not to say that the Steward's House was occupied longer than Liberty Hall. When Liberty Hall Academy abandoned Mulberry Hill to move into Lexington, it is entirely possible that the steward moved with the school. There are simply no records to date verifying or denying the fact. It must be acknowledged that the length of occupation may differ between the Steward's House and Liberty Hall. This can be compensated for to a degree. In the analyses, any ceramic types found at the Steward's House that post-dated the period of the Liberty Hall occupation were left out of

the analysis. This thesis is interested in comparing two structures of the same dates and utilized by basically the same people, so all evidence of a later occupation of the Steward's House is of no interest here. In the interest of eliminating as much as possible the length of occupation discrepancy between the two structures, these types of ceramic fragments were not included in the analyses. It is recognized that, despite all efforts, a certain discrepancy must exist in the ceramic collection from the Steward's House, but it is believed that this discrepancy is not large enough to significantly affect the conclusions of this thesis.

The variable being tested in this particular group of analyses then, is type of site. The hypothesis states that any differences found in the ceramic assemblages from these two structures must be due to the differences in function of the two structures. That is, the ceramics from the Steward's House will reflect food-related activities while the assemblage at the Hall will help describe the dormitory-classroom activities.

The formulating and testing of any hypothesis in archeology involves an acquaintance with the broader premises of the discipline as well as a solid knowledge and understanding of the site as well as the hypothesis. This chapter has outlined these theories as they apply to this study.

CHAPTER FOUR

DATA

Several of the methods of analysis used in this study were adapted partly from the manuscript by Outlaw, Bogley and Outlaw, "Rich Man, Poor Man." (See page 17).

Figure 3 represents Ceramic Type Distribution, the first analysis done on the ceramic assemblages from the Steward's House and Liberty Hall. Basically, it is a sherd count and a computation of the percentage of the entire assemblage represented by each ceramic type in each structure. This chart shows the relationship of the wares to each other within the structure and the relationship of the structures to each other, both absolutely and percentage-wise. In both structures creamware is the most abundant ware, both numerically and by percent. In the Steward's House redware is second in abundance, while in the Hall pearlware is second, with redware making a low third. Porcelain and stoneware each constitute less than 10 percent of the total number of ceramic fragments in both structures. The refined ware from the Steward's House totalled about 65% of the ceramic material (creamware and pearlware combined), and the coarse ware about 30%. At the Hall, refined ware accounted for more than 93% of the total, and coarse ware less than 6%. The Hall yielded 3933 ceramic fragments in all, while the Steward's House showed 2518 fragments.

This chart shows overall a more even distribution

FIGURE 3

CERAMIC TYPE DISTRIBUTION

STEWARDS HOUSE LIBERTY HALL

	TOTAL NO.	PERCENT	TOTAL NO.	PERCENT
CREAMWARE	1396	55.4%	2946	74.9%
PEARLWARE	262	10.4%	710	18.1%
PORCELAIN	69	2.7%	64	1.6%
STONEWARE	206	8.2%	6	.1%
REDWARE	585	23.2%	207	5.3%
TOTALS	2518	99.9%	3933	100%

of ceramic types in the Steward's House than at the Hall, where the assemblage is almost entirely dominated by refined wares.

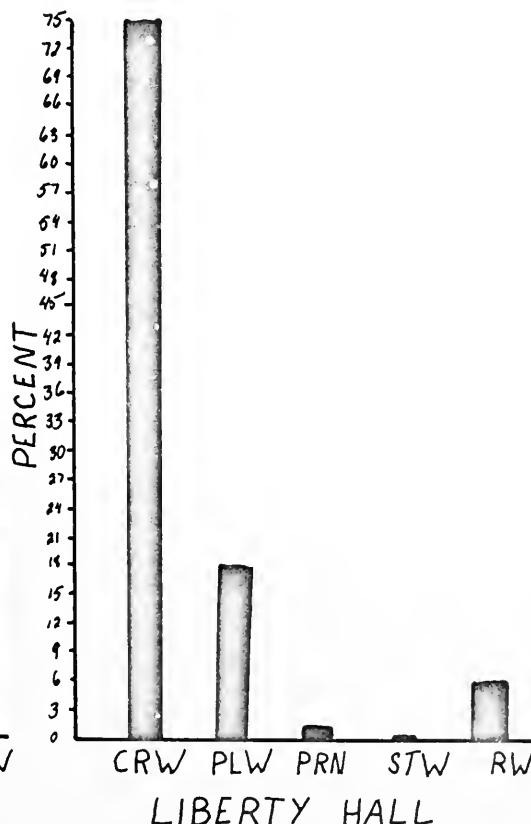
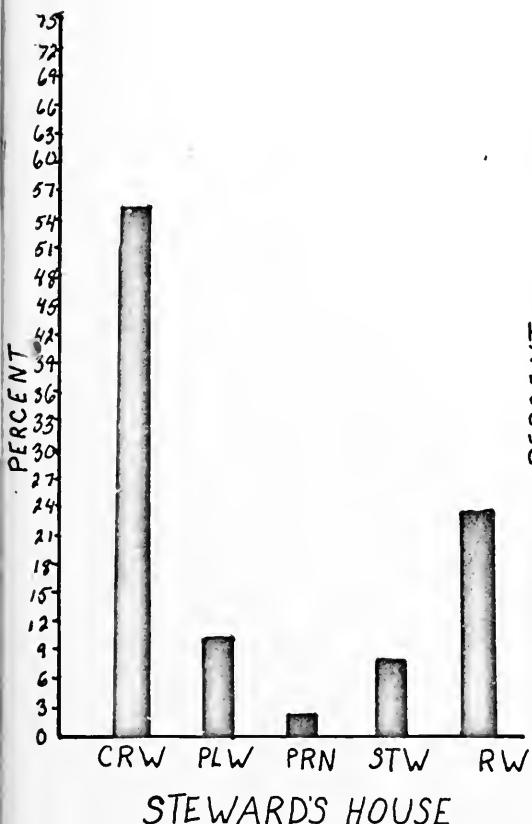
Figure 4, Ceramic Assemblages by Percent, is a bar graph of the percentages derived in Figure 3. It shows clearly the more even distribution of wares in the Steward's House as opposed to the overwhelming majority of refined ware at the Hall. It must be noted, however, that refined ware is also clearly more prevalent than coarse ware at the Steward's House. Figure 4 also shows that the relative amounts of ceramic fragments is basically the same within the two structures. In both structures there is more creamware than pearlware and more redware and pearlware than stoneware.

Figure 5, Ceramic Function Distribution, is an attempt to find any similarities between ceramic type and function. Creamware and pearlware were combined into refined ware because, since pearlware eventually replaced creamware as tableware, it is felt that they probably fulfilled the same type of functions. Coarse ware includes both redware and stoneware. Porcelain was separated from the rest of the refined wares for purposes of future studies, but can be included in the refined ware category in this study.

Five functional categories were used in this analysis. Four were derived from "Rich Man, Poor Man". They

FIGURE 4

CERAMIC ASSEMBLAGES BY %



KEY

- CRW = CREAMWARE
- PLW = PEARLWARE
- PRN = PORCELAIN
- STW = STONEWARE
- RW = REDWARE

were 1) storage - crocks, jugs, bottles, jars 2) preparation - mixing bowls, pans 3) serving - soupbowls, plates, tea cups, saucers, mugs, etc., and 4) other - decorative, recreational. A 'personal' category was added to the other four. Personal included toilet articles - water pitchers, water basins, chamber pots. It was felt that this additional category would help to show differences in the functions of the structures, especially if one structure was used only for cooking and eating.

Not all ceramic fragments were large enough to use in this analysis. Only the ones large enough to be able to tell from what sort of vessel they came were used. The majority of ceramics from both structures were too small to be of any use in this analysis. Only 557 fragments from the Steward's House and 87 fragments from the Hall were of sufficient size to use.

In both structures more than 90% of the ceramic material was used for serving, with refined ware constituting most of that 90%. Coarse ware used for serving was about 1% in both structures, and porcelain was about 10%. Overall, both the Steward's House and the Hall had about the same ratios of coarse ware : refined ware : porcelain used as serving vessels.

The ceramic fragments in the preparation category were few and far between. Only .4% of the ceramic assemblage from the Steward's House could be positively identi-

fied as being used for preparation of food. At Liberty Hall 2.3% could be said to have been preparation vessels. Most of the preparation category was coarse ware.

Coares ware also accounted for all the fragments in the storage category in both structures. The Steward's House had twice as much storage material relative to the other functional categories (6.8%) than did the Hall (3.4%).

There were no ceramic fragments of sufficient size that could be definitely categorized as personal. There were a few fragments that could have been either personal or preparation. It would be difficult to tell the difference between a wash basin and a mixing bowl from just a rim or base piece. These fragments were not included in this analysis because they could not be categorized without some doubts.

The 'other' category was fairly small in the Steward's House and non-existant at the Hall. It included marbles, some decorative ornaments, and a small porcelain dog, and constituted less than 2% of the total from the Steward's House.

In looking at this chart, it can be seen that coarseware is the most versatile ware at the Liberty Hall site. Coarse ware was used in every functional category in both structures. Refined ware was confined to serving and other, as was generally porcelain. Both structures showed an overwhelming majority of serving ware. The

FIGURE 5

CERAMIC FUNCTION DISTRIBUTION

STEWARD'S HOUSE

LIBERTY HALL

	COARSE	REFINED	PORCELAIN	TOTAL	COARSE	REFINED	PORCELAIN	TOTAL
SERVING	.7%	80.3%	9.9%	90.9%	1.1%	81.6%	11.5%	94.2%
PREPARATION	.3%	—	.1%	.4%	2.3%	—	—	2.3%
STORAGE	6.8%	—	—	6.8%	3.4%	—	—	3.4%
PERSONAL	—	—	—	0	—	—	—	0
OTHER	.1%	.3%	1.2%	1.6%	—	—	—	0
TOTAL	7.9%	80.6%	11.2%	—	6.8%	81.6%	11.5%	—

TOTAL NO. CERAMIC FRAGMENTS USED - 557

TOTAL NO. CERAMIC FRAGMENTS USED - 87

second largest category in both structures was storage.

Certain discrepancies noted in Figure 5 made the analysis in Figure 6 necessary. As has been stated, 557 ceramic fragments from the Steward's House were large enough to be able to use in that chart, but only 87 fragments in the Hall were large enough to use. There were more than six times as many large fragments from the Steward's House as there were from the Hall, and there was not a correspondingly greater amount of total fragments from the Steward's House (2518) as opposed to the amount of fragments from the Hall (3933). In fact, there are less fragments from the Steward's House than from the Hall.

Figure 6, Average Weight of Sherds, is a computation of the average weight in grams of each of the three groups of ceramics in both structures. All fragments from each group were weighed and the total number of grams was divided by the total number of fragments to gain the average mass of a single fragment of that type of ceramic in that structure. The results were surprising. All three ceramic groups from the Steward's House were larger (weighed more) than the corresponding groups from the Hall. The refined ware fragments from the Steward's House were almost six times larger (2.9 g.) than the refined ware fragments from the Hall (.53 g.). The coarse ware fragments from the Steward's House weighed twice as much on the average (5.36 g.) as the same group from the Hall (2.82 g.). The largest difference is found in the porcelain group. The porcelain

FIGURE 6

AVERAGE WEIGHTS OF SHERDS

STEWARD'S HOUSE

	TOTAL GRAMS	TOTAL NUMBER SHERDS	GRAMS/ TOTAL NUMBER	AVERAGE WEIGHT PER SHERD
REFINED	4873.5	1658	$\frac{4873.5}{1658}$	2.94 g.
COARSE	4240	791	$\frac{4240}{791}$	5.36 g.
PORCELAIN	220	69	$\frac{220}{69}$	3.19 g.

LIBERTY HALL

REFINED	1941	3656	$\frac{1941}{3656}$.53 g.
COARSE	601.5	213	$\frac{601.5}{213}$	2.82 g.
PORCELAIN	23	64	$\frac{23}{64}$.3 g.

at the Steward's House weighs on the average 3.19 grams as compared to the .3 grams from the Hall. These differences are large enough to have an effect on the results of Figures 3 (Ceramic Type Distribution) and 4 (Ceramic Assemblages by Percent).

Figure 7, Total Fragments of each Ceramic Group, is a bar graph of the information given in Figure 3, Ceramic Type Distribution. It shows the wares from both structures grouped into refined, coarse, and porcelain in their respective quantities of fragments. The major purpose of this chart is to facilitate the comparison with Figure 8.

Figure 8 is Wares by Total Mass. It is taken from the information in Figure 6, Average Weight of Sherds, and shows the total weight in grams of each ceramic group in each structure. It is best understood when compared to Figure 7, Total Fragments of Each Ceramic Group. The important point to notice is that, while it appears that the Hall contains more refined ceramic material than the Steward's House in the first figure (based on total ceramic fragments), when the mass of the ceramic material from the two structures is compared in the second chart, it becomes clear that there is actually more material at the Steward's House. This is an important point because it has a direct bearing on the hypothesis.

In the coarse ware group, the Steward's House has more coarse ware than the Hall in both number and mass.

C

C

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C

FIGURE 7

TOTAL FRAGMENTS OF EACH
CERAMIC GROUP

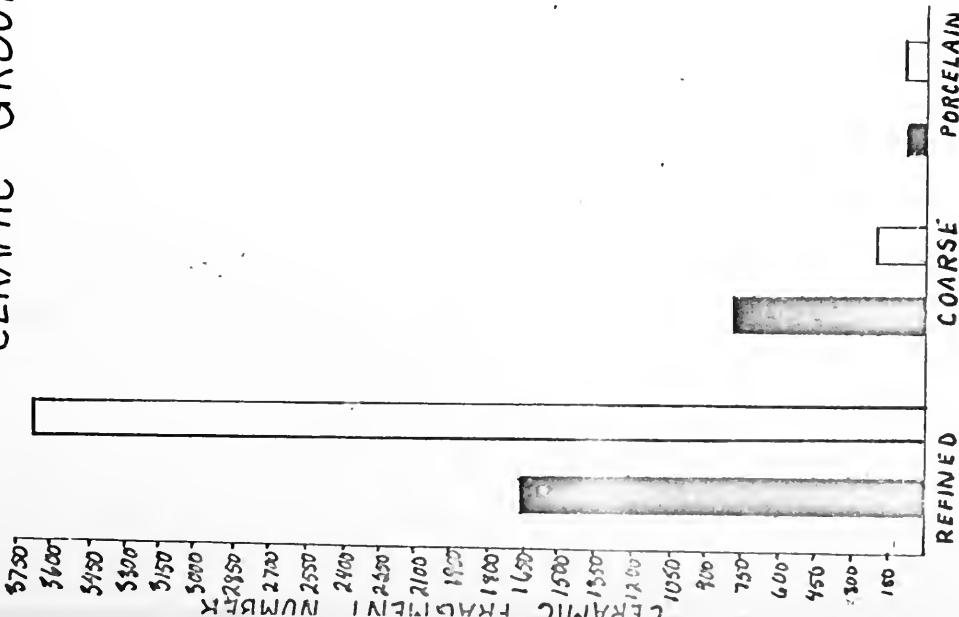
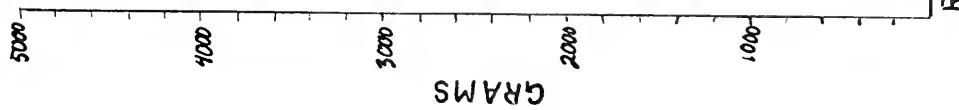


FIGURE 8

WARES BY TOTAL MASS



REFINED PORCELAIN
COARSE PORCELAIN
LIBERTY HALL
STEWARD'S HOUSE

In the analysis based on total number, however, it appears that there is about four times as much coarse ware at the Steward's House as at Liberty Hall, but if the analysis based on mass is consulted it can be seen that there is actually over seven times the amount of coarse ware at the Steward's House as opposed to the Hall. The same basic findings apply to the porcelain group. There is almost ten times the amount of porcelain by mass at the Steward's House than at the Hall, but the amount of fragments lead one to believe that there is an equal amount at both structures (69 fragments at the Steward's House, 64 fragments at the Hall).

The comparison of Figures 7 and 8 clearly show how misleading some of the analyses based on ceramic fragment numbers can be. They may distort the true ceramic situation and relationships between the two structures. The ceramics recovered from the Steward's House actually totals 9333.5 grams, and the ceramics recovered from the Hall totals 2565.5 grams. This is a far cry from the picture presented by the fragments from the Steward's House and the 3933 fragments from the Hall.

CHAPTER FIVE

CONCLUSIONS

In summary, this thesis has examined the ceramic assemblages from two structures within the same late 18th century site for the purposes of finding any differences in the assemblages that may reflect differences in function of the structures.

Generally, it has been observed that both the Steward's House and Liberty Hall contain a good amount of ceramic material, the majority of it refined ware. It appeared that Liberty Hall contained more total ceramic fragments than the Steward's House, but the weight analysis showed this to be erroneous. For reasons explored earlier, the ceramic fragments at the Hall were simply smaller and more numerous than those from the Steward's House. In terms of actual mass, more material was recovered from the Steward's House.

There are several points brought out in this thesis that support the hypothesis that the differing functions of the two structures will be reflected in the respective ceramic collections. These supporting facts will be examined here.

The Steward's House surrendered more total mass of ceramic fragments than did the Hall (9336.5 grams to 2565.5 grams). A Steward's House which is responsible for feeding many people would have need of a great number of ceramics--more than would be needed by the same people in their living quarters, or indeed in any other structure

with a non-food related function.

The Steward's House had a smaller refined : coarse ware ratio in both ceramic fragment total and total mass (2:1 and 1.2:1 respectively) than did the Hall (17:1 for total fragments and 3.3:1 in mass). This indicates a greater diversity of wares in the Steward's House and therefore perhaps a greater diversity of ceramic-related activities. The Steward's House had the greater amount of coarse ware. Coarse ware at the Liberty Hall site fulfilled mostly preparation and storage functions, activities common to a Steward's House. There was more redware found than stoneware, at least in ceramic fragment totals. Stoneware, because of its non-porous body and glaze, was used mostly in a storage function and could be found usually in a spring house.⁷¹ Redware was a more versatile ware, indicative of a greater range of activities. It was used for dry storage, preparation, and even serving. A redware plate fragment has been found at the site.

As was shown in Figure 5, Ceramic Function Distribution, the Steward's House also has a more even distribution of functionally diversified ceramics. The greater part of the ceramics is involved in serving, as they are at the Hall, but it is a smaller majority, with a larger percentage of storage and other ceramics.

It is tempting to argue that the ceramic comparisons in this thesis prove nothing at all because of all

the ceramics found at the Hall. It is all very well to say that the great amount of ceramics at one structure prove that it is a steward's house, but then could not the same be said for another structure? And we know through historic documentation that the second structure is most definitely not a steward's house; it follows that the first one need not be either.

Barbara G. Teller clears up this dilemma in her article "Ceramics in Providence, 1750-1800". "Abbot Lowell Cummings' statement...that ceramics were stored in bedrooms. The 'Great Bedroom' in the wealthy home was often outfitted for eating and entertaining, as had long been the Continental custom....In small homes and in rural areas this dual-purpose room served well into the nineteenth century."⁷² It is very likely that young gentlemen raised, if not in wealthy homes, then certainly in genteel and/or 'rural' homes, would carry this custom to school with them. Looking at the type of ceramic found at the Hall it was noted that over 80% of the total mass was refined ware, used mostly for tea sets and table ware, for "eating and entertaining". In this custom is found a very probable explanation for the great amounts of refined ware recovered from the dormitory-classroom, Liberty Hall.

In review, the three major facts discovered through the analyses presented in this thesis that support the hypothesis are,

- 1) Total Mass - the Steward's House was shown to

have contained more total mass of ceramics than did Liberty Hall, contrary to the false picture presented by the ceramic fragment totals. These findings uphold the first corollary that states "If the food preparation and consumption took place mainly in the Steward's House, then there should be more total ceramic material recovered from there than from Liberty Hall." These findings also support the sixth corollary, "If the purpose of the Steward's House was a dining hall for the entire school, then there should be more ceramics there than would be expected for a single-family dwelling."

2) Smaller Refined : Coarse Ware Ratio - This ratio was smaller in the Steward's House in both ceramic fragment totals and total mass. This finding supports the fifth corollary. "If the Hall was used as a dormitory-classroom, then a greater percentage of non-culinary ceramics should be found at Liberty Hall as opposed to the Steward's House." Non-culinary, in this case, can be seen as non-preparation and non-storage. The refined ware found at the Hall has already been explained.

3) Greater Diversity of Wares - The Steward's House had more coarse ware and porcelain than the Hall, both relatively and absolutely. This fact supports the second corollary, "If the food preparation and consumption took place mainly in the Steward's House, then there should be more storage, preparation, and serving vessels recovered

from there than from Liberty Hall." It is assumed here that as a general rule, refined ware is used in serving capacities and coarse ware is used mostly for preparation and storage.

The third and fourth corollaries follow by deduction. They are, "If the food preparation and consumption took place mainly in the Steward's House and Liberty Hall was used as a classroom-dormitory, then basically the same people used both structures concurrently.", and "'If the same people used both structures concurrently, then the differences found in the ceramic collections could not be a reflection of differences in socio-economic status of the inhabitants of the two structures."

In conclusion, it is felt that the results of the analyses support the hypothesis well. The variations found in the ceramic collections reflect different activities taking place in those structures, namely the Steward's House and Liberty Hall of Liberty Hall Academy.

SUGGESTIONS FOR FURTHER STUDY

Because the discrepancies in sizes of fragments between structures was not known at the start of this study, many of the analyses were based on ceramic fragment totals. It would be interesting to repeat some of the analyses, the Ceramic Function Distribution in particular, using weight and not number of fragments in the computations.

This study should be repeated when the excavations of the site are completed. Although it appears that further excavations on the interior of the Hall will not be very fruitful as far as ceramic artifacts are concerned, a study including them, and also ceramic collections from the other structures, would be more complete than the present study.

A study to determine the socio-economic status of the inhabitants of Liberty Hall Academy would be very useful to the project. It would have to involve much research of the Academy, the period, and other sites from the period. The ceramic artifacts are often the best indicators of socio-economic status. It has been for this purpose that porcelain was separated from the rest of the refined wares, as porcelain often connotes a higher status than other types of ceramics.

APPENDIX

Laws to be observed by the Students of Liberty Hall

- 1st That every Student attend by nine o'clock in the winter season and by eight in the summer for morning prayer and after he comes to school to study without disturbance.
- 2nd That every Student after morning prayer take his seat and study without speaking loud.
- 3rd That no Student presume to leave his seat or go out without leave first obtained from the Tutor or Rector.
- 4th That no Student when entered in the Academy shall presume to go away until the Academy be dismissed with prayer in the evening unless leave be first obtained nor make any disturbance in the Academy at any time whatsoever.
- 5th That every Student when at prayer or any other divine worship shall behave with decency and sobriety not whispering or making any unseemly gestures.
- 6th That every Student attend upon public worship on the Sabbath as often as it is held in the Academy.
- 7th That no Student presume to call any of his fellow Students out of his Christian or Sir name or give any disturbance in the house of study.
- 8th That no Student play at cards, dice or other unlawful games or lay bets of any sort.
- 9th That no Student be found at a tavern at unseasonable hours or be intoxicated upon any occasion nor engage in any dancing School nor shall he engage at any debauching revel whatever (commonly known by the names of frolics, dances, balls, entertainments).
- 10th That no Student presume to swear or to use any profane language whatsoever.
- 11th That no Student presume to play ball in Lexington at any time.
- 12th That no Student presume to stay all night in any other family than his own Lodgings unless he is invited by the Master of the family or has first obtained leave from the Tutor or the Rector.
- 13th That every Student treat all persons with decency and respect, especially their known superiors and the families where they lodge.
- 14th That every Student take his seat with his class in order, the Senior Class taking the first seat on the right hand.

15th That every Student rise up with a decent bow when the Rector, Tutor or any other Gentleman comes in or goes out.

16th That immediately after prayer every evening, two students pronounce each an oration taking it in rotation beginning with the lowest class.

17th That a Monitor be weekly appointed by the Rector or Tutor who shall note down in writing all the transgressions of these rules and deliver them to the Rector or Tutor every Friday Evening.

FOOTNOTES

¹James Deetz, "The Study of Archaeology", in In Search of Man, ed. E. L. Green (Boston: Little, Brown, and Company, 1973), p. 2.

²-----, "The Liberty Hall Dig - A Look Inot Our Past", Main Street, November, 1977, p. 5.

³J. McDaniel, D. Moore, and C. Watson, "The Eighteenth Century History of the Institutions Which Evolved into Washington Academy", (Washington and Lee University, 1977) All information in this chapter taken from this paper unless otherwise noted.

⁴see appendix.

⁵McDaniel, op. cit., p. 18.

⁶Richmond Recorder, January, 1803, as cited in McDaniel, op. cit.

⁷R. D. Mitchell, Commercialism and Frontier (Charlottesville, Va.: University Press of Virginia, 1977), p. 231.

⁸ibid., p. 231.

⁹ibid., p. 231.

¹⁰ibid., p. 231.

¹¹note on back of nail collection.

¹²McDaniel, op. cit.

¹³Parker Potter, "A Preliminary Study of Ceramic Analysis Tools", (Washington and Lee University, 1977) p. 1.

¹⁴see page 40.

¹⁵M. Outlaw, E. Bogley, and A. Outlaw, "Rich Man, Poor Man", 1977.

¹⁶C. Hall and K. Russ, "Compilation, Data Presentation and Preliminary Analysis for the Structure 1 Area", (Washington and Lee University, 1977) . . .

¹⁷Stanley South, ed. Conference on Historic Site Archeology Papers, 1971 (Columbia, S.C.: Institute of Archeology and Anthropology, University of South Carolina, June 1972), p. 85.

¹⁸Elizabeth M. Williams, "Analysis of the Coarse Ware From Structure 3 and how it Relates to Structures 1, 2, and 4.", (Washington and Lee University, 1977).

¹⁹Mark Derbyshire, "Metal Artifact Analysis at Liberty Hall", (Washington and Lee University, 1977).

²⁰Mark Derbyshire, "Atomic Absorption Analysis on Liberty Hall Buttons, 1977".

²¹O. Crenshaw, "General Lee's College; Rise and Growth of Washington and Lee University", (Cyrus Hall McCormick Library, Washington and Lee University, 1973), vol. 1, pp. 30-31

²²Hall and Russ, op. cit.

²³ibid., p. 53.

²⁴Derbyshire, op. cit. "Metal etc."

²⁵ibid., p. 36.

²⁶ibid., p. 32.

²⁷This information was taken from some old photographs of the area.

²⁸Richmond Recorder, op. cit.

²⁹Ivor Hume, A Guide to Artifacts of Colonial America, (New York: Little, Brown, and Company, 1973), p. 99.

³⁰A. H. Rice and J. B. Stoudt, The Shenandoah Pottery, (Strasburg, Va.: Shenandoah Publishing House, 1929), p. 1.

³¹_____, The Reeves Collection of Chinese Export Porcelain at Washington and Lee University, (Lexington, Va: Washington and Lee University, 1973), p. 6.

³²Hume, op. cit. p. 263.

³³ibid., p. 258.

³⁴ibid., p. 258.

³⁵ibid., p. 257.

³⁶ibid., p. 261.

³⁷ibid., p. 261.

³⁸ibid., p. 258.

³⁹ibid., p. 259.

⁴⁰David Denny, "English Pottery and Porcelain of the Eighteenth Century", (Washington and Lee University, 1976.) p. 4.

⁴¹Hume, op. cit., p. 137.

⁴²ibid., p. 102.

⁴³ibid. p. 125.

⁴⁴ibid., p. 126.

⁴⁵ibid., p. 123.

⁴⁶Denny, op. cit., p. 13.

⁴⁷Hume, op. cit., p. 99.

⁴⁹ibid., p. 125.

⁵⁰ibid., p. 126.

⁵¹ibid., p. 128.

⁵²ibid., p. 130.

⁵³ibid., p. 130.

⁵⁴ibid., p. 129.

⁵⁵ibid., p. 131.

⁵⁶ibid., p. 131.

⁵⁷ibid., p. 131.

⁵⁸ibid., p. 102.

⁵⁹ibid., pp. 98-99.

⁶⁰Encyclopedia Britannica, vol. 7, (Chicago: William Benton, Pub., 1959)

⁶¹Donald B. Webster, Decorated Stoneware Pottery of North America, (Rutland, Vt.: Charles E. Tuttle, Co., 1971), p. 37.

⁶²ibid., p. 42.

⁶³Deetz, op. cit. p. 6.

⁶⁴ibid., p. 6.

⁶⁵ American Heritage Dictionary, (1973), s.v. "artifact".

⁶⁶ E. Green, ed. In Search of Man, (Boston: Little, Brown, and Company, 1973), p. 17.

⁶⁷ , Patty Watson, S. LeBlanc, and C. Redman, "Relevant Data", in In search of Man, ed. E. Green, (Boston; Little Brown, and Company, 1973), p. 21.

⁶⁸ Green, op. cit., p. 60.

⁶⁹ Staff of the Liberty Hall Academy Archeological Project, "An Introduction to the Liberty Hall Academy Archaeological Excavations", (April 1977) , p. 14.

⁷⁰ ibid., p. 14.

⁷² Barbara Teller, "Ceramics in Providence, 1750-1800" Antiques, October 1968, p. 577.

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